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User's manual
viamobil®



Congratulations !

With the **viamobil** you have purchased a reliable and high-quality product from **alber**. After mounting to your wheelchair the **viamobil** will things make much easier for you, for example driving long distances with your wheelchair. It assists you in driving up slopes and slows the wheelchair down while going downhill. To get to know all advantages of the **viamobil** please read this user's manual carefully and pay attention to the safety instructions. If you have further questions, please call your dealer (see point 8).

The viamobil complies to the guidelines for medical products of the European Community 93/42/EEC



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1. Brief Survey *viamobil*

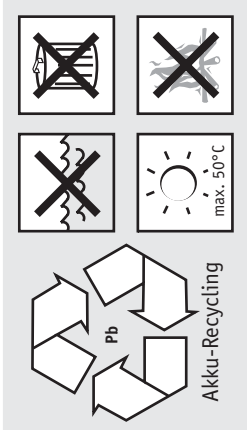
1.1 Technical Data

Nominal Capacity:	150 W
Maximum Capacity:	300 W
Speed:	variable, up to 5,0 km/h [3,1 mph] (forward) and up to 2,5 km/h [1,5 mph] (backward)
Climbing and Braking Capacity:	up to a slope of 18% (at a total weight of 130 kg / 286 pounds)
Range:	: up to 20 km (12,5 miles) depending on the surface topography and weight of the person

Battery

Battery:	Sealed lead acid battery, 2 x 12 V, 12 Ah
Operating voltage:	24 V
Battery dimensions:	151 x 99 x 95 mm
Maximum current:	25A

After expiry of the service life, return the battery to **alber** or the **alber** specialist dealers who will dispose of it correctly.

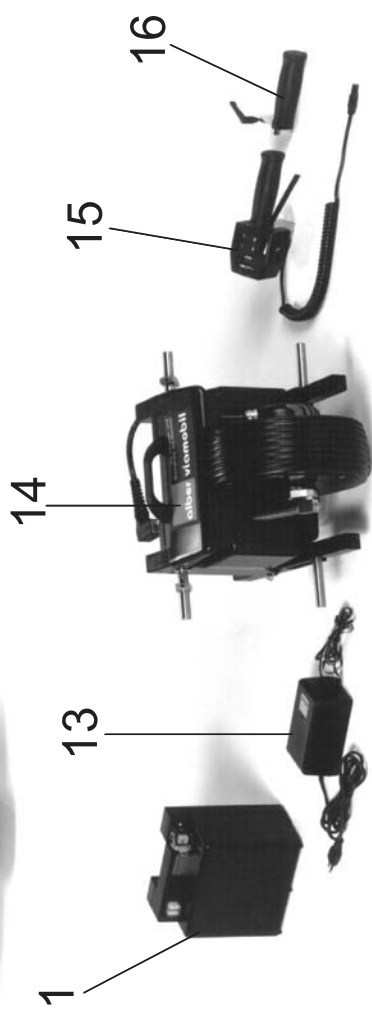
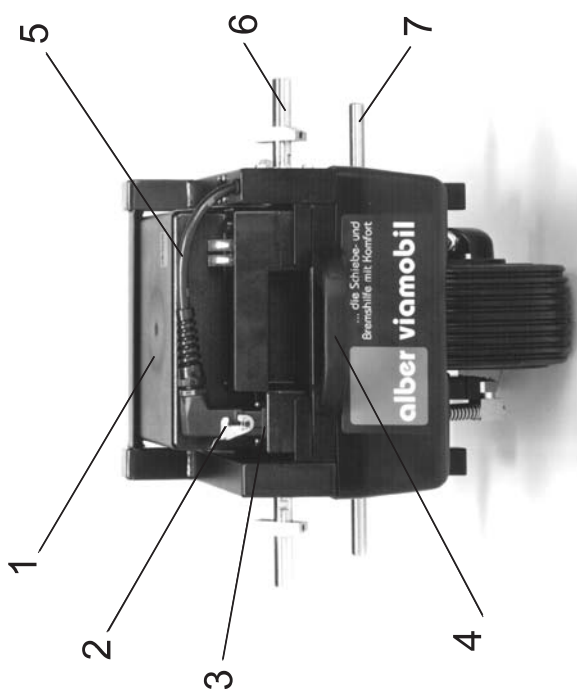
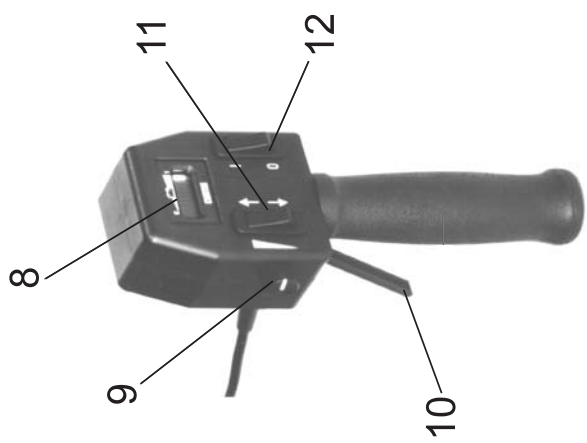


Charger

Designation:	BC2403 A
Input voltage:	100-240 V
Nominal output voltage:	24 V
Charging current:	3 A
Charging process:	IU0U

Weight

Control Unit:	0,9 kg (1,9 pounds)
Batteries:	9,0 kg (19,8 pounds)
Drive Unit:	14,0 kg (30,8 pounds)
Battery Charger:	0,9 kg (1,9 pounds)
Total Weight:	24,8 kg (54,6 pounds)
Temperature of operation:	-10°C / +40°C

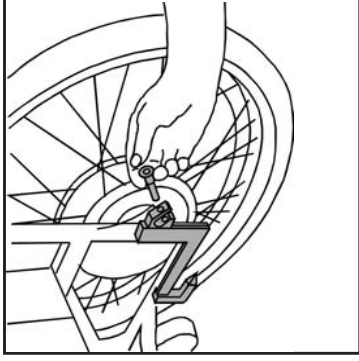


1.2 Essential Parts

- | | |
|----------------------|----------------------|
| 1. Battery Pack | 9. Speed Control |
| 2. Clamp | 10. Driving Lever |
| 3. Charging Plug | 11. Direction Switch |
| 4. Carrying Grip | 12. ON/OFF Switch |
| 5. Power supply Cord | 13. Battery Charger |
| 6. Upper Bolt | 14. Driving Unit |
| 7. Lower Bolt | 15. Control Unit |
| 8. Charge Indicator | 16. Extra Handles |

2. Before Operation

2.1 Attaching to the Wheelchair

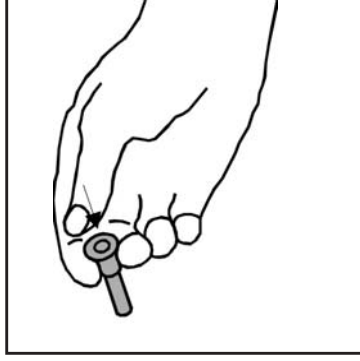


The wheelchair must be equipped with the necessary brackets for the **viamobil**. If you are already using a **scalamobil** (a stair climber for wheelchairs, manufactured by **alber**) the same bracket-system may be used for the **viamobil** attachment.

Attaching the brackets and adjusting the **viamobil** must be done by Ulrich Alber GmbH or authorized personnel only.

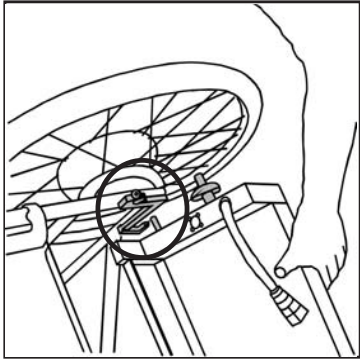


Always attach or detach the **viamobil** without the batteries.



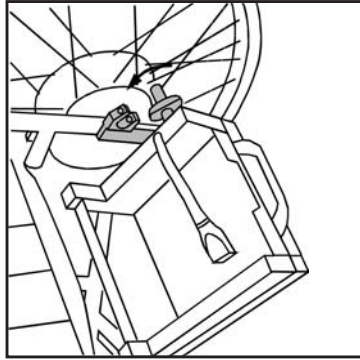
Taking out the locking pins

- Take out the locking pins from the holding device by pressing the button in the pin's center with your thumb and simultaneously pulling it with your index and middle finger.



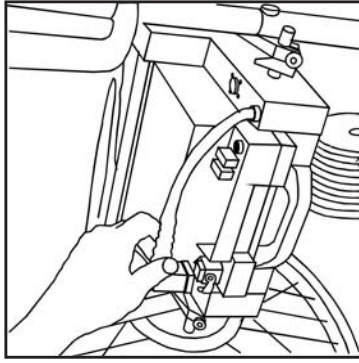
Insert the **viamobil** into the lower hooks

- Insert the lower bolt (7) of the **viamobil** in the lower hooks of the brackets. Push the upper part of the device forward until the upper bolts (6) catch the brackets. Secure the upper bolts by reinserting the two locking pins into their respective holes in the brackets. Use the same procedure as described to take out the locking pins.



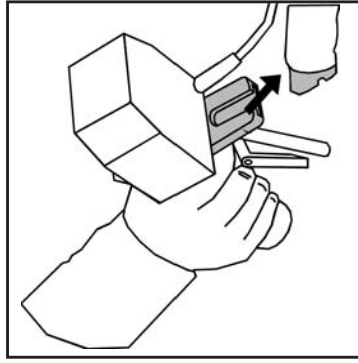
Insert the **viamobil** into the brackets

- Push the upper part of the device forward until the upper bolts (6) catch the brackets. Secure the upper bolts by reinserting the two locking pins into their respective holes in the brackets.



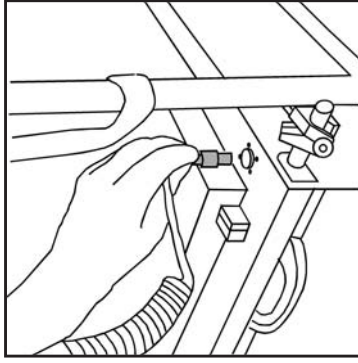
Connecting of the power supply cord

- Put the battery pack (1) into its place on the **viamobil** and connect the power supply cord (5).



Attaching the control unit

- Next the control unit (15) is attached. Push the receiver of the control unit into its specifically provided fixture on the push handles of the wheelchair and tighten the locking lever.
- By pulling the locking lever outward, it can be put in a convenient, not hindering position.



Plugging in the helix cable

- Finally, plug the helix cable of the control unit into the designated socket of the drive unit. Make sure that the nose of the plug fits into the groove of the socket. Do not use any force when you plug it in.



Make sure that the helix cable does not touch the back wheel of the wheelchair while driving.

In case that the extra handle (16) has not been attached to the other side of the wheelchair, proceed as described for attaching the control unit.

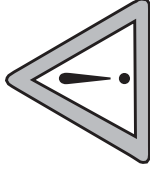
2.2 Charging the Battery Pack



- To ensure the batteries' durability, charge them before using them for the first time. Please see chapter 5.3

3. Operation

3.1 Safety Instructions

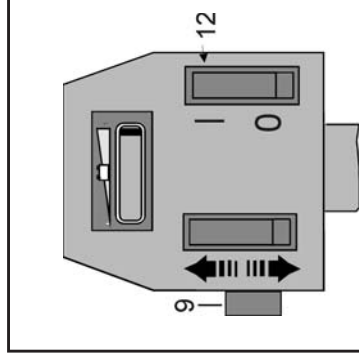


In order to use the **viamobil** safely, please follow these instructions strictly:

- The **viamobil** may be attached only to approved standard wheelchairs, that coincide with the authorized standards of technology.
- Attaching the **viamobil** to a wheelchair, make sure that the wheelchair is equipped with locking brakes / parking brakes that are independent of the wheels' air pressure.
- The wheelchair to which the **viamobil** is attached must have its locking brakes in such a position that the attendant of the **viamobil** may easily reach them.
- When you use the **viamobil**, you also need to consider the wheelchair's user's manual; e.g. its maximum weight is reduced by the weight of the **viamobil** (approximately 25 kg / 55 pounds).
- Only the attendant may operate the **viamobil**. The wheelchair driver cannot use the **viamobil** by himself because of the danger of tipping over backwards particularly when driving on slopes.
- Before you start, turn the speed control (9) to the position of the lowest speed.
- The attendant must be physically capable to catch the wheelchair plus its driver if it tips over backwards. Otherwise it is necessary to mount anti tippers.

- The mounting and changing of holding devices for the **viamobil** may only be done by **alber** or authorized personnel.
- The **viamobil** must be checked and approved annually by your dealer.
- If you drive parallel to obstacles that are narrower than the wheelchair's track, make sure that they do not exceed 3 cm (1,18 inches).
- Do not use the **viamobil** on slopes that exceed 18%. In no case may the slope exceed the maximum inclination permitted by the wheelchair manufacturer.
- Cross the edges of sidewalks carefully; if they exceed 8 cm (3,15 inches) in height, you need to switch off the **viamobil**.
- Avoid using the **viamobil** in the sand, do not use it crossing puddles.
- Before using the **viamobil** on slopes, you should practice on even ground and learn how to handle the device safely.
- Do not drive closely to precipitous edges, abysses, and stairs when the **viamobil** is in operation.
- When you use the **viamobil** on slopes, you need to secure it additionally with the locking brakes of the wheelchair every time you stop or turn it off.
- The efficiency of the additional drive may be affected by electromagnetic fields, generated for example, by mobile telephones. The additional drive therefore, should be switched off if mobile telephones are being used in the close vicinity of the wheelchair.
- The additional drive can also affect other equipment such as theft-proof cabinets in departmental stores.

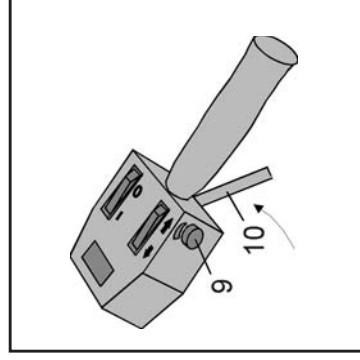
3.2 Operation



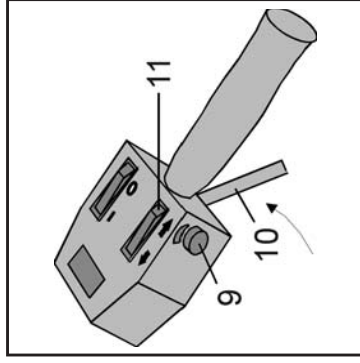
First check whether the pressure of the wheelchair's tires coincide with the manufacturer's data.

Driving forwards

- Turn on the device with the ON/OFF Switch (12).
- Turn the speed control (9) to the lowest speed, and, as the case may be, unlock the wheelchair's locking brakes.



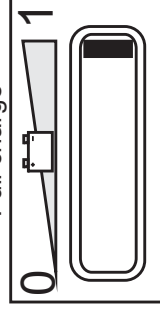
- Then pull the driving lever (10) completely and simultaneously adjust the speed control (9) to the speed you find comfortable.
- As you drive, adjust the speed with the speed control (9) to the local conditions, e.g. obstacles, slopes, people, etc..



Driving backwards

- If you want to drive backwards, put the direction switch (11) to "backwards" (in this position the arrow points at you).
- Then turn the speed control (9) to the lowest speed before you start, and select the speed you find most comfortable.

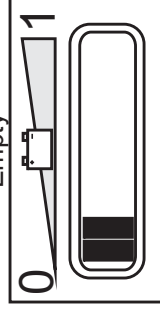
Full charge



Checking the Battery capacity

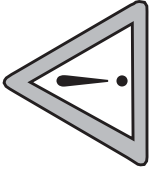
- The charging indicator (8) continually informs you about the charge status of the batteries. If it starts to flash, the batteries' energy is almost used up. If you continue driving, the device may stop soon.

Empty



To spare the batteries, always turn the device off after each use.

3.3 Obstacles



You have to switch off the **viamobil** when crossing obstacles exceeding a height of 8 cm (3,15 inches), such as sidewalks.

- In that case, drive forward to the obstacle.
- Lift the front wheels of the wheelchair a bit by pushing its push handles slightly backward and downward at the same time.
- Then push the wheelchair on or across the obstacle.
- Afterwards turn on the **viamobil** again and continue the trip.

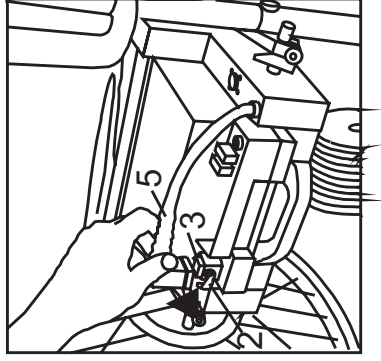
3.4 Dangerous Situations

You may not use the **viamobil** in dangerous places and situations. The **viamobil** must be turned off in places such as:

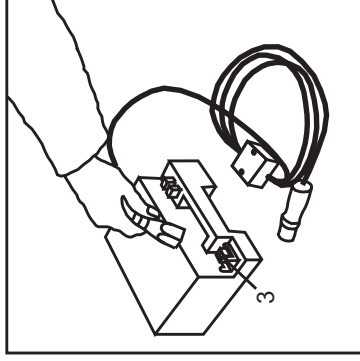
- airports, train stations, harbors and construction sites
- quay walls, landing-places, docks, paths and places close to water
- narrow walkways, bridges, slopes such as ramps, narrow pathways on slopes such as dikes, mountains
- crossing of major roads, intersections, railway crossings
- narrow and/or steep winding pathways next to major roads or in the proximity of steep edges or abysses
- snow-covered or icy surfaces
- closed, fenced-in, enclosed spaces or areas


4. Accessories

4.1 Vehicle Charging Cable

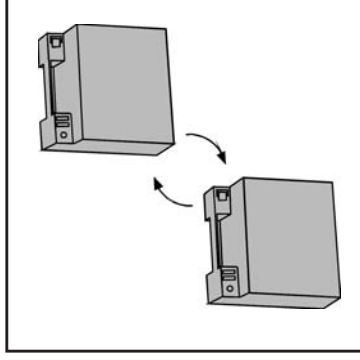


- With this charging cable you can charge the **viamobil** while driving in your car by plugging it into the cigarette lighter.
- Open the spring-loaded latch (2) on the plug (3) of the **viamobil** and pull out the power supply cord (5) of the battery pack.
- Now the battery pack can be taken out easily. First lift it, then pull it towards you, and put it on the cars floor.
- Plug the end of the vehicle charging cable into the socket (2), and the other end into the cigarette lighter.
- The batteries are charged by means of the car battery. They are equipped with an overcharge protection.



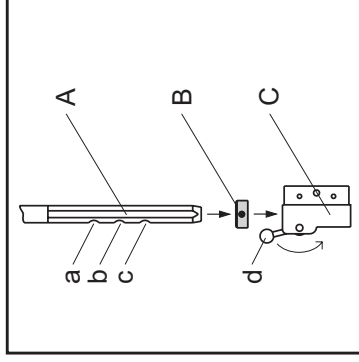
 The batteries will only be charged when the engine is running.

4.2 Extra Battery Pack



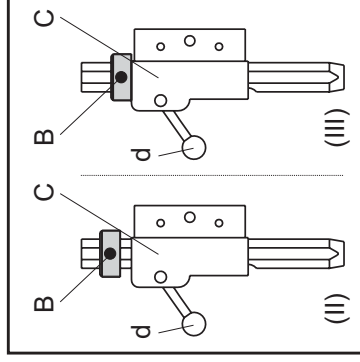
- If you want to make longer trips, it is advisable to buy a second battery pack, which doubles the **viamobil's** original range.
- Simply open the clamp (2) on the plug (3) and pull the power supply cord (5) out of the battery pack.
- Take out the discharged battery pack at the grip.
- Put in the extra battery pack and connect it with the power supply cord (5).
- Lock it with the clamp (2).

4.3 Additional handgrips (optional)



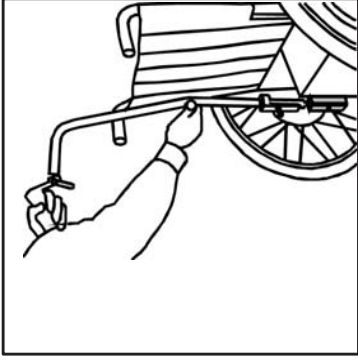
Mounting the additional handgrips

- If not already mounted, push the adjusting ring (B) onto the tube (A). Do not yet tighten the threaded pin in the adjusting ring (B).
- Push the tube (A) together with the screwed-on adjusting ring (B) into the guide mount (C).
- The tube (A) has 3 grooves in which the guide mount (C) can be slotted for setting at the following heights:
 - a=96 cm distance from the floor
 - b=93 cm distance from the floor
 - c=90 cm distance from the floor
- Clamp the guide mount (C) in the desired position as shown in drawing (II). The lever (d) only requires pressing down slightly until fixed in position.
- Push the adjusting ring (B) onto the top edge of the guide mount (C).
- Tighten the threaded pin in the adjusting ring (B).



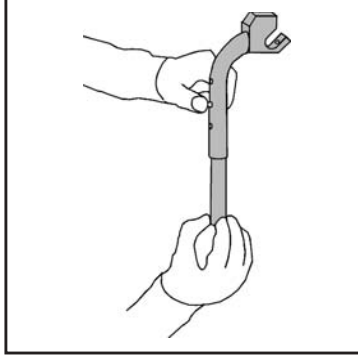
Removing and attaching the additional handgrips

- By pressing the lever (d) upwards (see picture I) the handgrips are released and can be removed. The adjusting ring (B) secures the already selected position.
- When attaching, push the additional handgrips into the guide mount (A) again and clamp **lightly** in position using the clamping lever (d).



- To **attach** the extra handles, slide them into the designated receptacle at the back of the **viamobil** and turn the indexing bolt a quarter rotation so that it locks into the indexing hole. Make sure that the handles are securely fastened by pulling them two times up and down.
- To **remove** the extra handles, pull out the indexing bolt and turn it a quarter rotation. Take the handles out by simply pulling upwards.

4.4 Anti Tippers



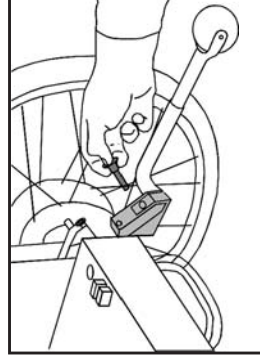
In case you intend to use the **viamobil** on slopes frequently, we recommend that you attach the anti tippers.

Position of the anti tippers

- The position at which the push spring button snaps in has to be such that the entire supporting wheel stands out behind the wheelchair's back wheel in order to achieve the sufficient supporting effect.



If you want to climb steps, separate the anti tippers from the device by removing the locking pins at the holding devices.



Attachment of the anti tippers to the **viamobil**

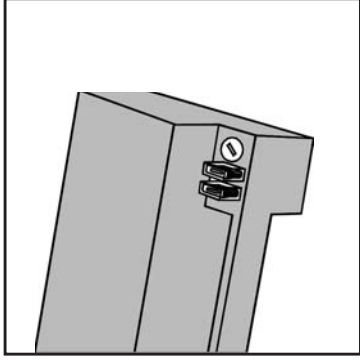
- Open the locking pin at the receptacle of the anti tippers and push the latter into said receptacle.
- Secure it with the locking pin. Then adjust the anti tippers to the appropriate height.



The anti tippers must be attached in a right and a left position. Please check the marks on the two anti tippers.

5. Care and Maintenance

5.1 Changing the Electrical Fuses



Due to a short circuit or overstress the fuses may be destroyed. However, they can be easily exchanged.

- Open the clamp (2) and pull out the power supply cord (5), so you can reach the fuses more easily. After removing their transparent plastic covers, the two 25A fuses can be easily taken out and replaced by new ones.
- The 2A fuse is located in a screwed connection on the right of the two 25A fuses. To exchange it, simply remove the old fuse with a screw driver and screw in the new one.

5.2 General Information about the Battery Pack

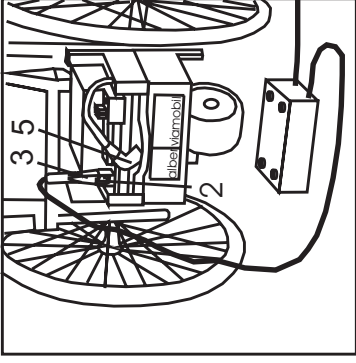
The batteries of your **viamobil** are rechargeable, maintenance-free, high quality dry gel-cell batteries. The durability of dry gel-cell batteries depends considerably on the charging / discharging cycles. If you avoid totally discharging your lead batteries, you can expect more than 200 times of the full capacity, and far more than 1000 partial dischargings. If you totally discharge your batteries, you reduce their capacity as well as their lifetime.

- Avoid a total discharge of your batteries. Always turn off your **viamobil** when you are not driving. The battery pack of your **viamobil** should be recharged after each partial discharge, i.e. after each use.
- Dry gel-cell batteries are subject to a so-called self discharge. Therefore the batteries should, whenever possible, always be connected to the **alber** automatic charger. After charging the batteries the **alber** automatic charger switches from the charging mode to the preservation of the charge, which makes it impossible to overcharge the batteries.
- If you store dry gel-cell batteries over a longer period of time (without regularly recharging them) they suffer a reduction of capacity. However, after several recharging / discharging cycles, they recover their original capacity.
- The lead batteries can be recharged or discharged in any position. They are considered as safe as dry batteries and certified for airline transportation by DOT and IATA.
- Incorrect handling of the battery may result in the leakage of electrolytic liquid. This may cause injuries to the skin or damage clothing.
- Should skin or eyes come into contact with the electrolytic liquid, rinse immediately with clear water and consult a doctor.
- Do not expose the battery to fire or burn. This may cause the battery to explode.
- Do not short circuit the battery. A short circuit causes extremely high currents which may damage the battery or the device.
- After expiry of the service life, return the battery to **alber** or the **alber** specialist dealers who will dispose of it correctly.



Taking care of your batteries means charging them regularly.

5.3 Charging the Batteries



To charge the batteries, use the **alber** Automatic Charger or the vehicle charging cable exclusively.

- Open the spring-loaded latch (2) on the plug (3) and pull out the power supply cord (5).
- Take the batteries out by lifting them and pulling them toward you.
- Connect the charger with the socket on the batteries, and lock the charger with the spring-loaded latch (2).
- Plug the main plug into the wall outlet.
- Please handle the charger according to the user's manual located at the bottom of the charger. As soon as the batteries are fully charged, the charger switches to retaining the charge. Overcharging is, therefore, impossible.



If the batteries are not used, they should - in order to retain the charge - always be connected to the charger. This increases the lifetime of dry gel-cell batteries.

5.4 Cleaning

The control unit may only be cleaned with a damp (not wet) cloth.

The driving wheel should also be cleaned carefully, either by compressed air or with a dry brush.

5.5 Maintenance

Your **viamobil** is a low-maintenance device. However, in the interest of your safety, have the **viamobil** thoroughly checked every two years, even if there aren't any outward signs of damage or malfunction. For any maintenance work please contact your dealer or any **alber**-distributor.

6. Problems and Solutions / Troubleshooting

The viamobil does not work after you switch it on:

The batteries are almost empty-the **viamobil** turns itself off to protect the batteries from total discharge. In such case, please charge the batteries.

The viamobil stops when used on steep slopes:

The slope is too steep. The device is overstressed. Support it by manual pushing or pulling, as the case may be.

The viamobil stops for no apparent reason:

The device may have been overstressed. Check the fuses and exchange them, if necessary
The batteries are empty. Check the charge indicator (8). Should either one or both of the display's left segments flash alternatingly, the batteries are empty. In such case, charge the batteries.

The driving wheel does not go up after switching off the viamobil:

You can still use the **viamobil**; however, contact your dealer right away

No traction on the driving wheel, the driving wheel spins free:

Check the distance between the wheel and the ground when the wheel is in its upper position. The distance should be 1,5 cm (0,6 inches). Possibly the spring is broken. Contact your dealer.

7. Warranty and Liability

7.1 Warranty

Ulrich Alber GmbH grants a warranty of 12 months (6 months for the batteries) for the **viamobil**, which is valid from the date of purchase.

7.2 Liability

Neither Ulrich Alber GmbH nor its agents or authorized dealers and sales representatives will be liable for safety, reliability or performance of the **viamobil** or for any claims for personal injury or property damage which may arise from the following:

- the **viamobil** was not handled properly
- the operation was carried out by untrained operators
- the **viamobil** was not checked and serviced annually
- the **viamobil** was used other than in accordance with all instructions and precautions contained in the operator's manual and on the product labeling
- the **viamobil** was operated with less than sufficient battery charge or on batteries that are not regularly and properly charged
- Parts or accessories other than those recommended by the manufacturer of the **viamobil** were substituted
- Parts from the **viamobil** were removed
- Assembly and repairs were carried out by unauthorized persons
- outside parts were mounted on or connected to the **viamobil**



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